

Notice of Allowability

Application No.

09/828,596

Examiner

Jonathan G. Sterrett

Applicant(s)

HOMSI, ALEXANDRE EL

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1-3-06.
2. ☒ The allowed claim(s) is/are 1-4, 6-21 and 23-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hunter Webb, Reg. 54,593 on 27 January 2006.

2. Examiner amends **Claims 1, 17, 23 and 25**. Currently **Claims 1-4, 6-21 and 23-25** are pending in the application.

See attached Examiner's Amendment.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

None of the prior art of record, taken individually or in any combination, teach, inter alia, a system and method for creating one or more workflow steps defining a set of routing rules for one or more resources that trigger said workflow steps; creating one or more sub-flow processes, said sub-flow processes incorporating one or more of pre-existing internal workflow processes; creating one or more workflow conditions based on one or more formulas, said conditions specified in one of the following ways: success, failure, a percentage of success or a percentage of failure, creating one or more external process workflow objects, said objects exchanging data with one or more sources external to the organization in said network, analyzing in real time said one or more workflow

Art Unit: 3623

processes; creating workflow processes using workflow steps, routing rules, subflow processes, workflow conditions, external process workflow objects, and routing one or more resources locally and remotely using the routing rules and intelligent search engine; analyzing the workflow processes in real time to optimize workflow functionality, as recited in independent **Claims 1, 17 and 25**.

The novelty of the invention is in the combination of the limitations cited in independent **Claims 1, 17 and 25** and not in any specific individual claim limitation.

The prior art reference most closely resembling the applicants claimed invention is Chatterjee. While Chatterjee discloses creating workflows, workflow steps, and providing resources, it lacks analyzing the workflow process in real time to optimize functionality, as recited in **Claims 1, 17 and 25**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cho JP 11316780 A discloses a hierarchical workflow management system.

Art Unit: 3623


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS

JGS 1-12-06


TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

EXAMINER'S AMENDMENT

1. (Currently Amended) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes in an organization, said system comprising:

a workflow segment designer creating one or more workflow steps defining a set of routing rules for one or more resources that trigger said workflow steps;

a sub-flow designer creating one or more sub-flow processes, said sub-flow processes incorporating one or more of pre-existing internal workflow processes;

a condition designer creating one or more workflow conditions based on one or more formulas, said conditions specified in one of the following ways: success, failure, a percentage of a success or a percentage of a failure;

an external process designer creating one or more external process workflow objects, said objects exchanging data with one or more sources external to the organization in said network;

a workflow analyzer analyzing in real-time said one or more workflow processes;

said system creating workflow processes using said workflow segment designer, sub-flow designer, condition designer and external process designer, and said system routing said one or more resources locally and remotely using said set of routing rules and said intelligent search engine, and said system analyzing, via said workflow analyzer, said created workflow process in real-time to optimize workflow functionality,

wherein said intelligent search engine is a rules-based engine.

2. (Original) A system for designing a network-enabled workflow management module

integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said system further comprising a deadline handler that provides for control of workflow processing times through deadlines.

3. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 2, wherein said deadlines is defined in one of the following ways: based on a value extracted from a form or based on a predefined deadline.

4. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said system further comprises a requestor filter to restrict said routing based on identities of requestors triggering said workflow steps.

5. (Cancelled).

6. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim [[5]] 1, wherein said rules associated with said rules engine are stored in a rules database.

7. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said formulas are interpreted using said intelligent search engine to determine appropriate workflow recipients for said one or more resources.

8. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1 wherein said created workflow processes are stored in a central database for future access by other workflow processes.

9. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said system further comprises a workflow administration manager setting the frequency and priority of said created workflow processes.

10. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow

processes, as per claim 9, wherein said workflow administration manager is implemented using a Java servlet.

11. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said workflow analyzer further comprises a statistical analyzer analyzing workflow history of said workflow processes.

12. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 11, wherein said statistical analyzer further comprises:

an average processing time estimator calculating an average processing time of each of said one or more, created workflow processes;

a daily load estimator calculating a daily load associated with each user in said system,
and

a global load estimator calculating the overall load associated with each user in said system.

13. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said network comprises any of the following: local area network (LAN), wide area network (WAN), HTTP network, world wide web (WWW), wireless

network, PSTN/PBX network, or Internet.

14. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said remote source accessed by said external process workflow objects is a remote database.

15. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 1, wherein said one or more resources to be routed are further updated by accessing a script library.

16. (Original) A system for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 15, wherein said script library is an application programming interface (API) library.

17. (Currently Amended) A method for designing a network-enabled workflow management algorithm integrated with an intelligent search engine to provide for a real time analysis of workflow processes in an organization, said method comprising:

defining one more workflow events that trigger workflow processing;

building one or more workflow cycles using one or more workflow objects, said step of

building said one or more workflow cycle further comprising:

creating one or more workflow steps defining a set of routing rules for one or more resources that trigger said workflow processing; creating one or more sub-flow processes incorporating pre-existing internal workflow processes;

creating one or more workflow conditions based on one or more formulas;

creating one or more external process workflow objects for exchanging data with one more sources external to the organization in said network, and

customizing one or more routing and notification messages so said one or more resources are routed in said workflow cycle based on customized routing types, routing rules, routing options, and notification messages,

validating said created one or more workflow cycles, and

analyzing said validated one or more workflow cycles in real-time to optimize workflow functionality, and

statistically analyzing said validated one more workflow cycles.

18. (Original) A method for designing a network-enabled workflow management algorithm integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 17, wherein said method further comprises setting deadline date controlling workflow processing times in said one more workflow cycles.

19. (Original) A method for designing a network-enabled workflow management algorithm integrated with an intelligent search engine to provide for a real time analysis of workflow

processes, as per claim 18, wherein said deadline date is defined in any of the following ways:
with a handling margin that defines a predetermined amount of time said resources are to stay
unprocessed in said one or more workflow processes or defined based on an extracted value from
a form.

20. (Original) A method for designing a network-enabled workflow management algorithm
integrated with an intelligent search engine to provide for a real time analysis of workflow
processes, as per claim 17, wherein said method further comprises restricting routing based on
identities of requestors triggering said workflow processing.

21. (Original) A method for designing a network-enabled workflow management algorithm
integrated with an intelligent search engine to provide for a real time analysis of workflow
processes, as per claim 17, wherein said method further comprises setting the frequency and
priority of said created one or more workflow processes.

22. (Canceled).

23. (Currently Amended) A method for designing a network-enabled workflow management
algorithm integrated with an intelligent search engine to provide for a real time analysis of
workflow processes, as per claim ~~22~~ 17, wherein said step of statistically analyzing said validated
one or more workflow cycles comprising:

calculating an average processing time associated with each of said one or more created

workflow processes;

calculating a daily load associated with each requestor in said one or more work cycles,

and

calculating a global load associated with each requestor in said one or more work cycles.

24. (Original) A method for designing a network-enabled workflow management algorithm integrated with an intelligent search engine to provide for a real time analysis of workflow processes, as per claim 17, wherein said network comprises any of the following: local area network (LAN), wide area network (WAN), HTTP network, world wide web (WWW), wireless network, PSTN/PBX network, or Internet.

25. (Currently Amended) A method for designing a network-enabled workflow management module integrated with an intelligent search engine to provide for a real time analysis of workflow processes in an organization, said method comprising:

creating one or more workflow processes, said step of creating one or more workflow processes further comprising:

creating one or more workflow steps defining a set of routing rules for one or more resources that trigger said workflow steps;

creating one or more sub-flow processes, said sub-flow processes incorporating one or more of pre-existing internal workflow processes;

creating one or more workflow conditions based on one or more formulas, said conditions specified in one of the following ways: success, failure, a percentage of a success or a percentage

of a failure;

creating one or more external process workflow objects, said objects exchanging data with one or more sources external to the organization in said network, and

analyzing said created one or more workflow process in real-time to optimize workflow functionality;

routing said one or more resources locally and remotely using said set of routing rules and said intelligent search engine; and

controlling workflow processing times through deadlines.

26. (Canceled).

27. (Canceled).

28. (Canceled).

29. (Canceled).

30. (Canceled).